

# CardAccess



## ZigBee-to-IR Module Installation Guide

Put **MORE** Automation in Home Automation.™

### Features

The Card Access Z2iR ZigBee-to-IR Module is a wireless ZigBee interface with two independent IR emitter ports. It is powered from any 5V USB 2.0-compliant port supplying continuous power (even when the device with the USB port is turned off). The Module can connect any IR device into a Control4 home automation environment. The Z2iR Module also operates as a ZigBee® (IEEE 802.15.4) parent-routng node which can improve ZigBee mesh density and footprint-often solving ZigBee problems when devices are installed on the edges of a mesh network.

### Supported Models and Requirements

This documentation applies to the following Card Access products

Z2iR10A-ZP	ZigBee-to-IR Module (single pack)
Z2iR10A-ZP-10P	ZigBee-to-IR Module (10 Pack)

### Important Safety Instructions



**WARNING!** You should install this device in accordance with all national and local electrical codes.



**IMPORTANT!** This product is not intended for direct connections to AC mains (120V/220V). Refer to specifications.



**IMPORTANT!** Improper use or installation of this device can result in **LOSS OF/DAMAGE TO PROPERTY.**



**IMPORTANT!** Using this product in any manner other than outlined in this document voids your warranty. Also, Card Access is **NOT** responsible or otherwise liable in any way for any damage resulting from the misuse of this product. See the section of this document entitled **WARRANTY** for details.

### What Is Included

- Bubble bag containing one (1) Wireless ZigBee-to-IR Module
- Installation Guide / Product Warranty / Product Registration Document
- Two (2) True IR Emitters
- One (1) 5V DC Mini USB Power Supply Module
- One (1) Mini USB 2 Meter Cable
- One (1) Dual-Stick Adhesive Strip

### Specifications

Power Source:	5VDC Power Supply
Power Usage:	100mA at 5VDC, fully active
Device Temperature Range:	Operational -20°F to 158°F (-28°C to 70°C) Humidity 5% to 95% Non-Condensing Storage -20°F to 158°F (-28°C to 70°C)
Dimensions (LxWxD):	2.80”(L) x 1.75”(W) x 0.57”(D)” (77.1mm x 44.5mm x 14.4mm)
Communications:	ZigBee (IEEE 802.15.4) 2.4 GHz, 15-channel, spread spectrum radio

### Installation

# 1

Place the ZigBee-to-IR Module in a location which ensures:

- Easy access to a power outlet
- Close proximity to the device(s) to be controlled



**NOTE:** Make sure the ZigBee-to-IR Module gets good ZigBee wireless reception by:

- Ensuring it is within 150 feet of another ZigBee device.
- Ensuring the device is not installed by other electrical equipment that may cause interference with the ZigBee signal (such as some cordless telephones or other devices that operate on the 2.4 GHz frequency).
- Avoiding exposure to extreme environmental conditions.

# 2

Download the Z2iR DriverWorks Driver using Composer's Online Driver Database or from the Card Access web site: [www.cardaccess-inc.com/automation/drivers](http://www.cardaccess-inc.com/automation/drivers). (Copy the Driver to the "Control4 / Drivers" folder on your PC. The Control4 / Drivers folder should be located under "My Documents" on your PC.)

# 3

Launch Composer. If Composer is already running, shut it down and restart it.

# 4

Using Composer, make a connection to Director. Select the System Design Tab to add the Z2iR Driver. The Driver can be found by selecting the Search Tab and then the Local Database. The device type is "other" and the manufacturer is Card Access. **NOTE:** The Driver can be added to any room in the project.

# 5

Power up the Z2iR Module using the supplied USB Power Supply and Mini USB cable. In Composer, choose Connections and click the Network Tab. Next click on the unidentified "Card Access Z2iR" device. Identify the Z2iR in Composer by pressing the clear identification button on the top of the Module four (4) times. The LED should start flashing yellow. Once the Z2iR Module has been identified in the system, the LED will blink green several times. If identification fails, the LED will blink red several times.

- Once the Z2iR's MAC ID address appears in the Identify dialog box, click "Close" to close the dialog.
- After a few seconds, the Z2iR Module's LED should change to a solid GREEN color, indicating it has been successfully identified in the Control4 project.

### Troubleshooting

If the Z2iR Module is not working it may need to be reset back to factory settings. To perform a factory reset, do the following:

- While the Z2iR Module is still powered on, press the button on the top cover 13 times.
- After the Z2iR Module has performed its reboot sequence, the LED will turn solid red and it will need to be re-identified into the project.



**NOTE:** Any IR codes that were cached in the Z2iR Module will be lost and will need to be re-transmitted and again cached in the Module. In most instances, there may be a slight delay (milliseconds) in operation the first time an IR code for the target device is cached or re-cached.

### Card Access Product Support

For help on the installation or operation of this product, email or call Card Access Product Support. Please provide your exact model number and the MAC ID/Serial Number for the device. You may contact Product Support by phone (801-748-4900 x 1), by e-mail ([dealersupport@cardaccess-inc.com](mailto:dealersupport@cardaccess-inc.com)) or on the Internet at <http://www.cardaccess-inc.com/automation/support>.

### Regulatory Compliance

The Card Access Z2iR ZigBee-to-IR Module complies with relevant standards established by the following regulatory bodies: Federal Communications Commission (FCC), Conformité Européenne (CE), Industry Canada, and Restriction of Hazardous Substances (RoHS).

### FCC

FCC ID: MHIZ2iR. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient or relocate the Z2iR Module.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



**IMPORTANT!** Changes or modifications not expressly approved by Card Access, Inc. void the user's authority to operate the equipment.

### CE

We, Card Access, Inc. of 11778 South Election Road, Suite 260, Salt Lake City, Utah, 84020 USA, declare under our sole responsibility that the product, the Card Access Z2iR Module, Model Number Z2iR10A-ZP, to which this declaration relates, is in conformity with the following standards and / or other normative documents:

EN60950, EN55022, EN55024

We hereby declare that the above named product is in conformity with the essential requirements and other relevant provisions of Directive 1999/5/EC.

The conformity assessment procedure referred to in Article 10(3) and detailed in Annex II of Directive 1999/5/EC has been followed.

### Industry Canada

IC: 3681C-Z2iR10A

This class B digital apparatus complies with Canadian ICES-003.

CET appareil numérique de la classe B est conforme a la norme NMB-003 du Canada'

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

## Restriction of Hazardous Substances (RoHS)

All parts in the Card Access Z2iR ZigBee-to-IR Module meet the material restrictions of RoHS, as proposed by the RoHS Technical Adaptation Committee. This is based upon information provided by suppliers of the raw materials used by Card Access, Inc. to manufacture these products. As such, Card Access, Inc. makes no independent representations or warranties, expressed or implied, and assumes no liability in connection with the use of this information.

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## One-Year Limited Warranty

This product is warranted to be free of defects in material and workmanship for one year from date of original purchase from Card Access, Inc. ("Card Access").

Card Access will, at its election and as the purchaser's or end user's sole and exclusive remedy for any breach of the limited warranty set forth above, repair or replace this product if a defect in material or workmanship is identified and communicated to Card Access within the one-year period described above. Card Access is not responsible for removal or reinstallation costs. This warranty is not valid in cases where damage to this product is the result or arises out of misuse, abuse, incorrect repair or improper wiring or installation.

To notify Card Access of any breach of the foregoing limited warranty and to obtain warranty service, contact Card Access Customer Support by e-mail to [dealersupport@cardaccess-inc.com](mailto:dealersupport@cardaccess-inc.com) or by calling 801-748-4900, extension 1, to obtain a Return Materials Authorization ("RMA") number and instructions for returning your defective product to Card Access.

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Some states/provinces do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of special, incidental or consequential damages, so these limitations and exclusions may not apply to you. This warranty gives you specific legal rights. You may also have other rights which vary from state/province to state/province.

This is Card Access' exclusive written warranty.

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## Contact Card Access

Web: <http://www.cardaccess-inc.com/automation>

Email: [dealersupport@cardaccess-inc.com](mailto:dealersupport@cardaccess-inc.com)

Phone: +1.801.748.4900

Support: Extension 1

Sales: Extension 2

Fax: +1.801.748.4901